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Barcelona, 13 Maig 2015

Barcelona Supercomputing Center
Centro Nacional de Supercomputación

EXCELENCIA SEVERO OCHOA

EARTH SCIENCES DEPARTMENT

Albert Soret
Co-leader of the Service group

Barcelona Supercomputing Center

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EXCELENCIA SEVERO OCHOA

- Created in 2005; 350 employees
- Research, develop and manage information technology
- Facilitate scientific progress and its application in society

Earth Science Department

- Research development at global and regional scales
- Areas include:
  - Air quality models
  - Mineral dust modeling
  - Atmospheric modeling
  - Climate prediction modeling
- Innovative capacity of researchers
- Use of HPC and Big data technologies

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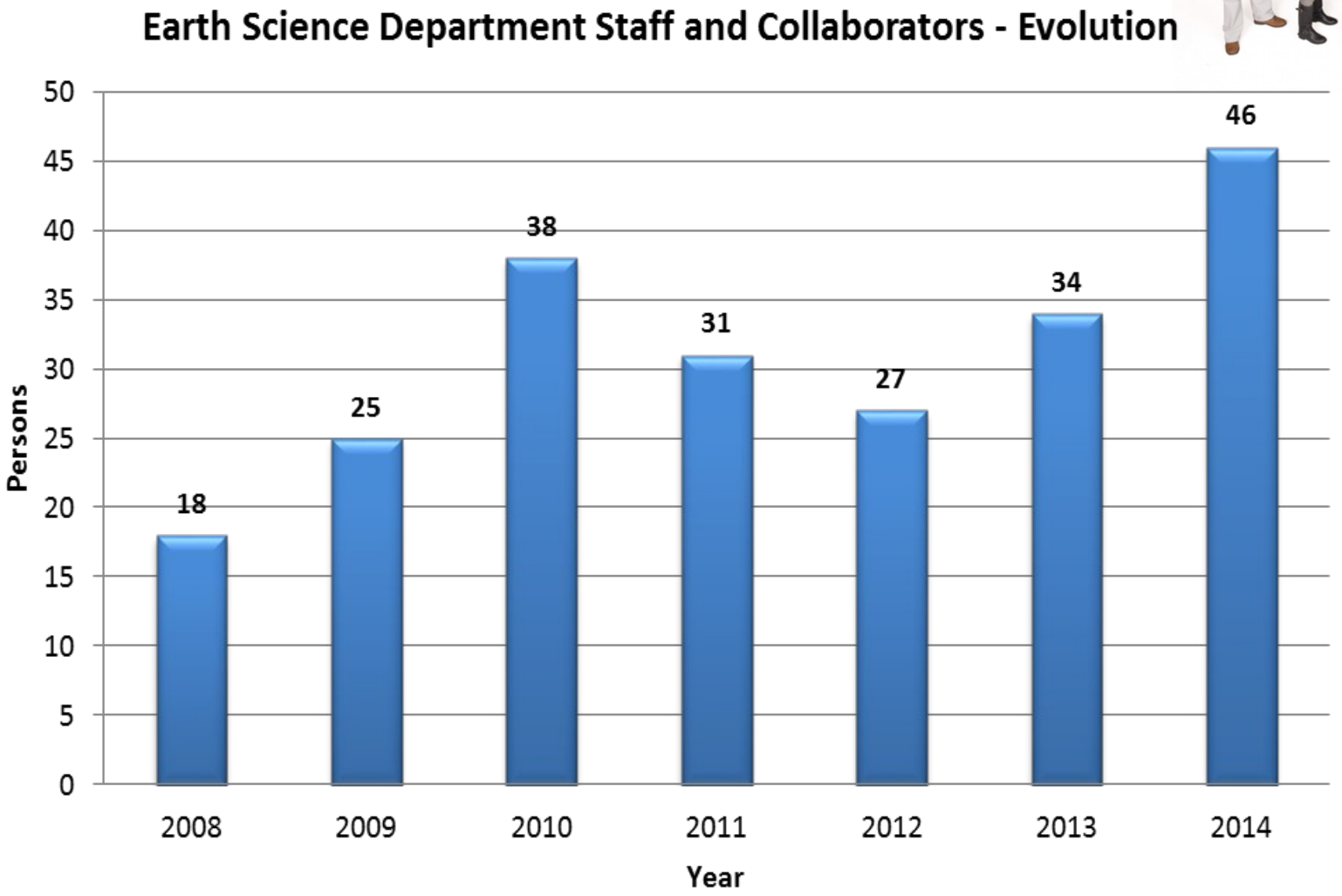
People

People


Earth Science Department Staff and Collaborators - Evolution
Persons
Year
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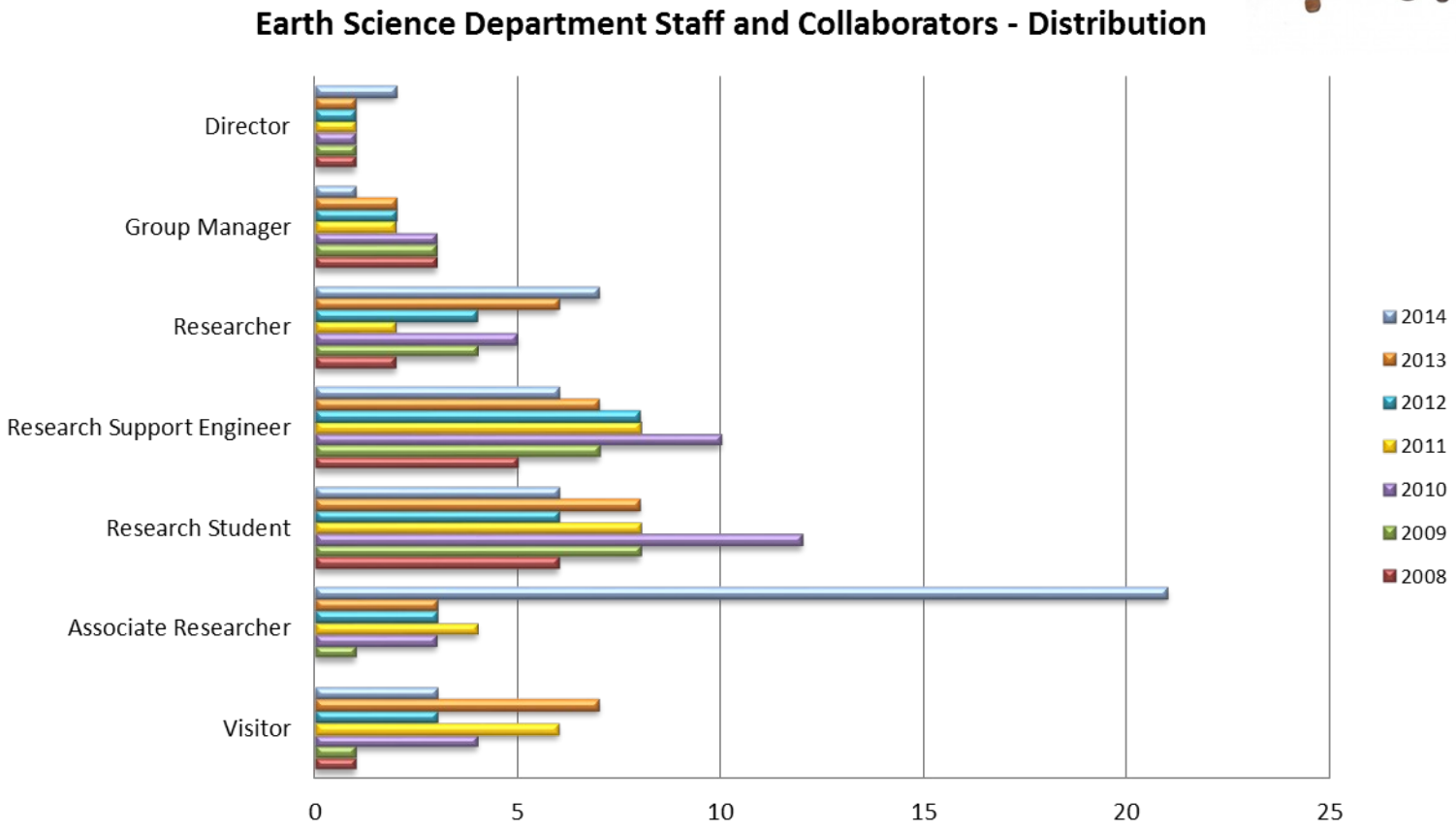
People


Earth Science Department Staff and Collaborators - Distribution
Director
Group Manager
Researcher
Research Support Engineer
Research Student
Associate Researcher
Visitor
0
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2014
2013
2012
2011
2010
2009
2008

People in 2015

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Francisco Doblas-Reyes
Mar Rodriguez
Gabriela Tarabanoff

Earth System Services

Gustavo Arévalo
Melanie Davis
Nube Gonzál
Aida Pinto
Valentina Sicardi
Albert Soret
Enric Terradellas
Verónica Torralba

Climate Prediction

Virginie Guemas
Omar Bellprat
Louis-Philippe Caron
Eleftheria Exarchou
Neven Fuckar
François Massonnet
Martin Ménégoz
Chloé Prodhomme
Danila Volpi

Atmospheric Composition

Oriol Jorba
Sara Basart
Enza Di Tomazzo
Lorenzo Fileni
Antonis Gkikas
Maria Goncalves
Marc Guevara
Vicenzo Obiso
Michele Spada
Maria Teresa Pay
Victor Valverde
Lluis Vendrell

Computational Earth Sciences

Kim Serradell
Oriol Mula-Valls
Francesco Benincasa
Pierre-Antoine Bretonnière
Carles Carmona
Miguel Castrillo
Muhammad Asif
Domingo Manubens
Nicolau Manubens
Oriol Tintó
Dídac Roca

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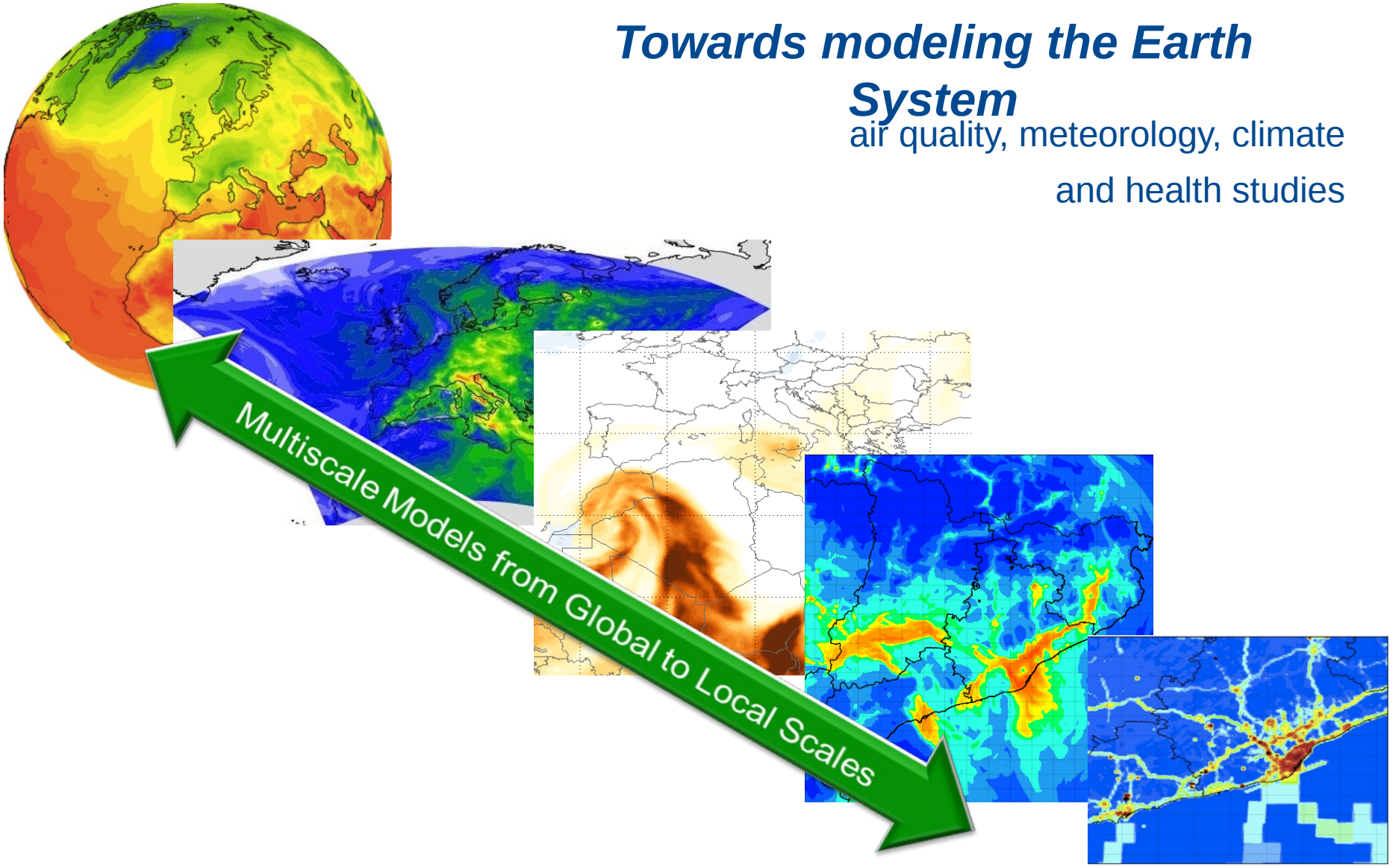
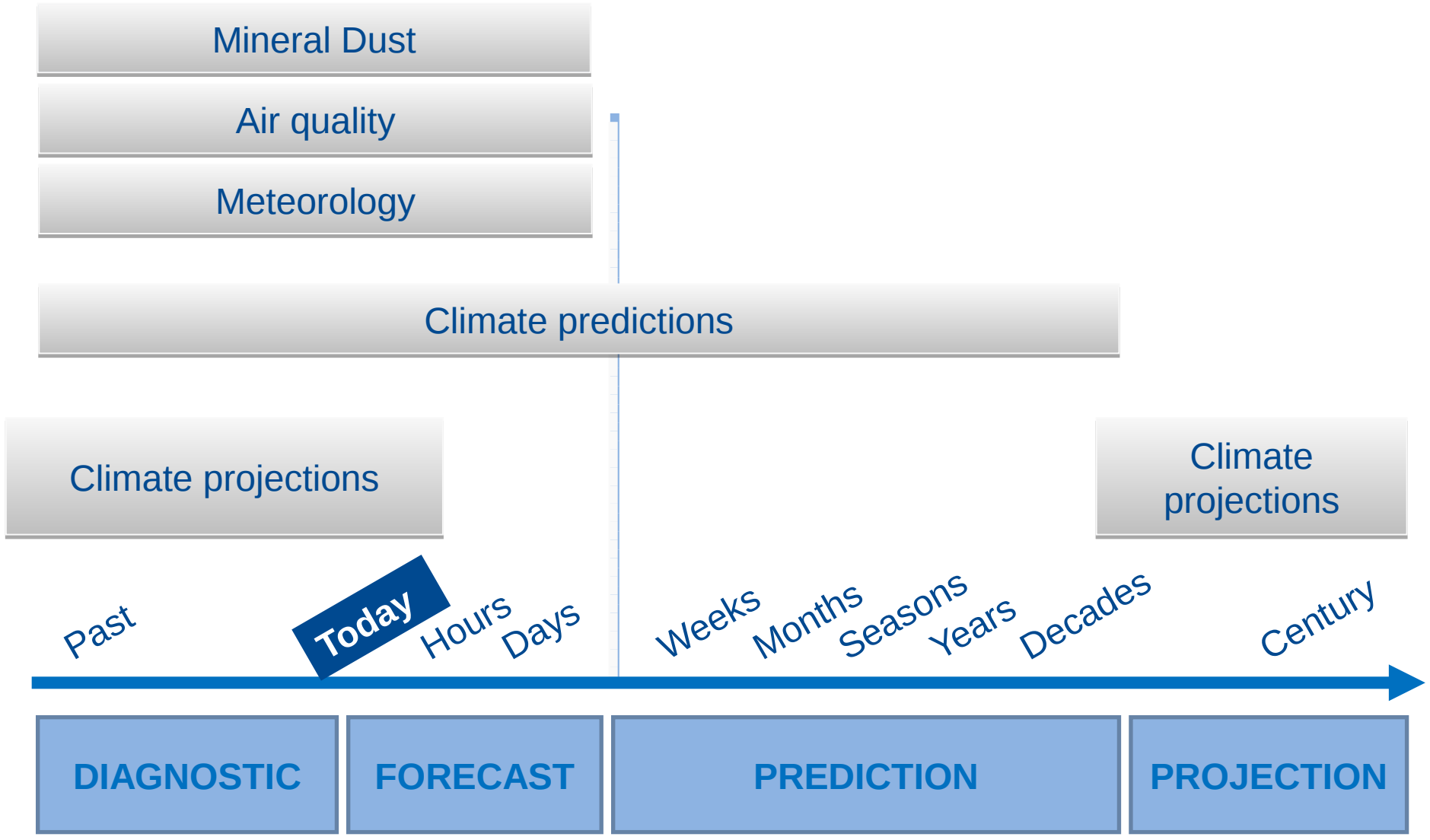
Research lines

Towards modeling the Earth System

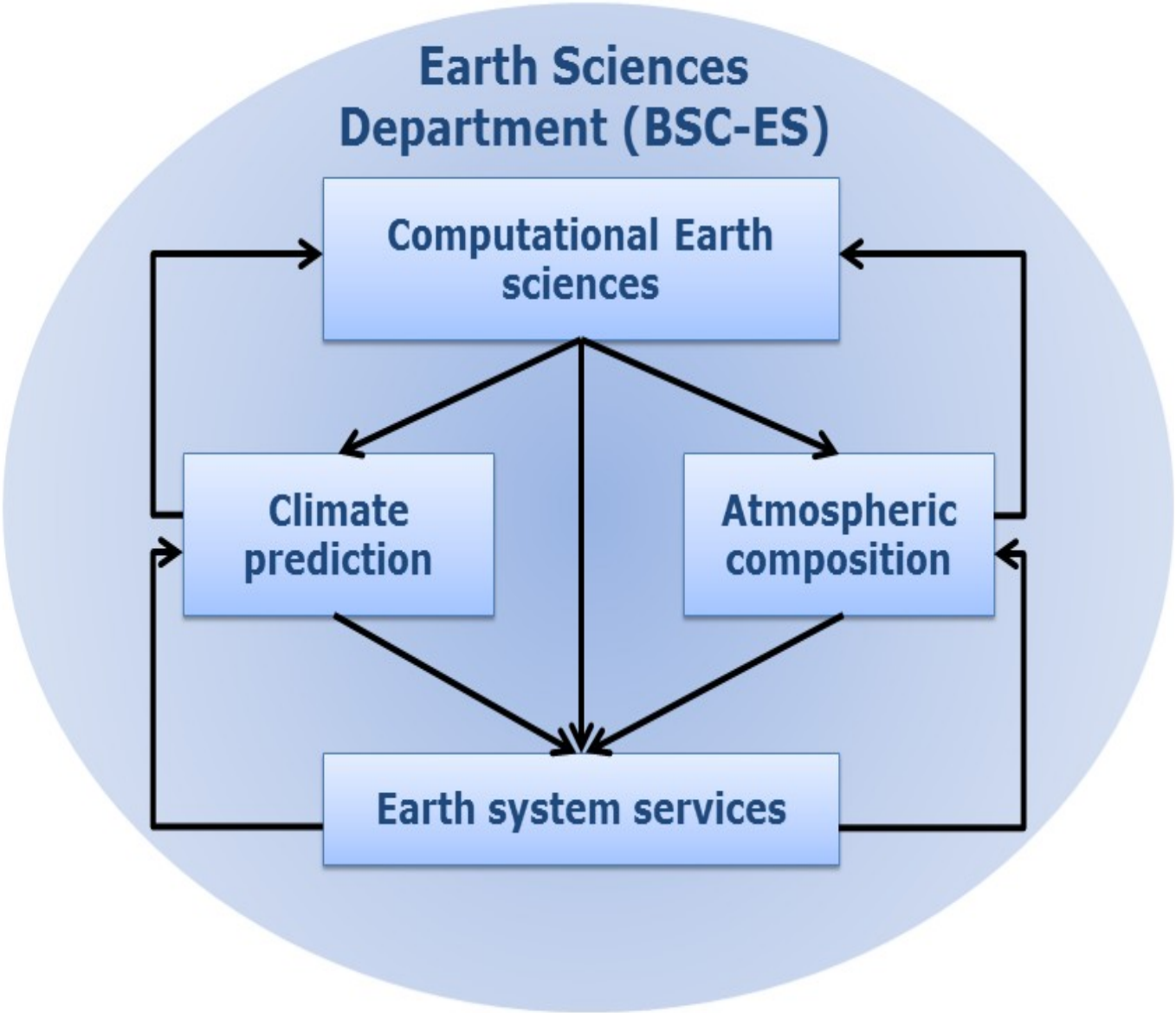
air quality, meteorology, climate and health studies



Temporal scales



Groups


Earth Sciences Department (BSC-ES)
Computational Earth sciences
Climate prediction
Atmospheric composition
Earth system services

CALIOPE air quality operational forecasts

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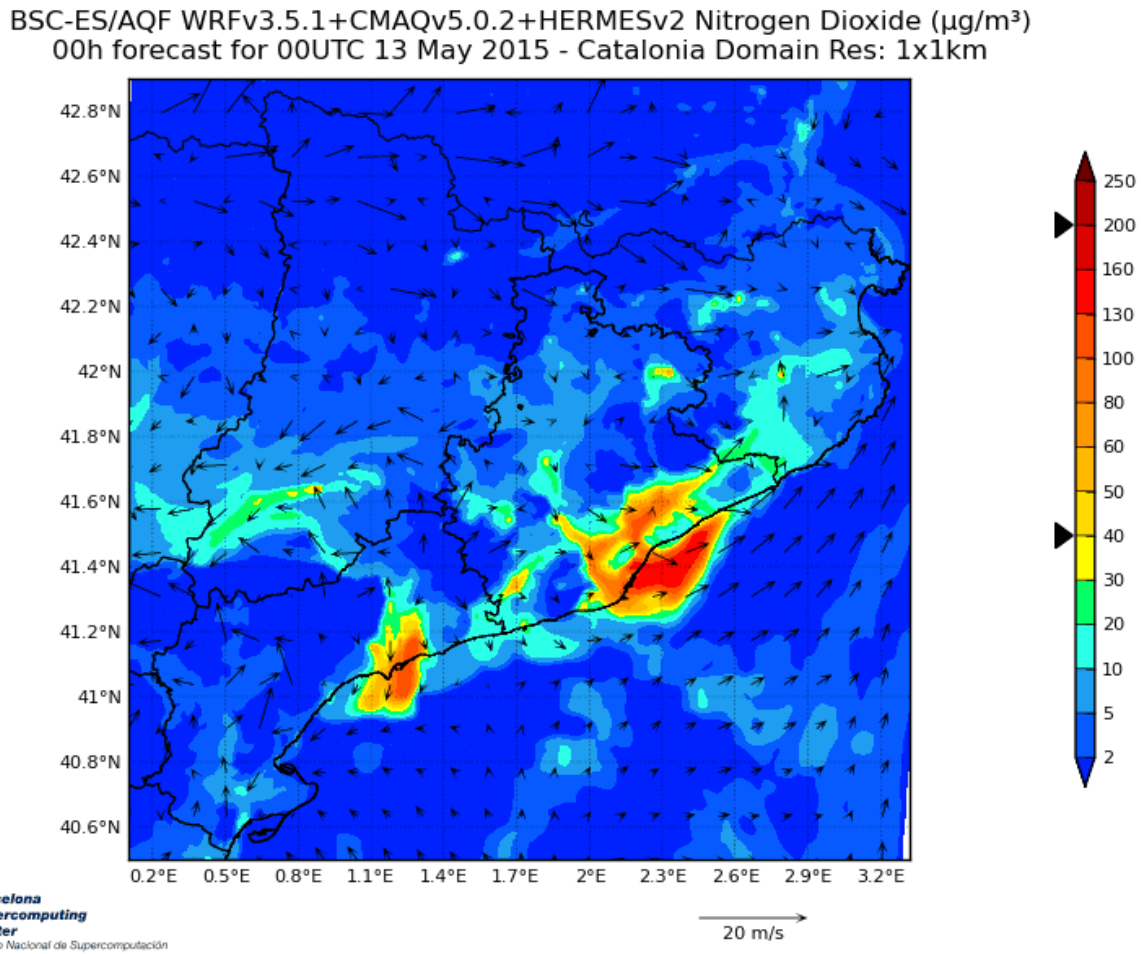
Provides air quality related information for the coming days and for the application of short term action plans for air quality managers.



Information is delivered using both online or custom applications:

www.bsc.es/caliope

ANDROID APP ON Google play

Available on the App Store

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WMO mineral dust forecasts

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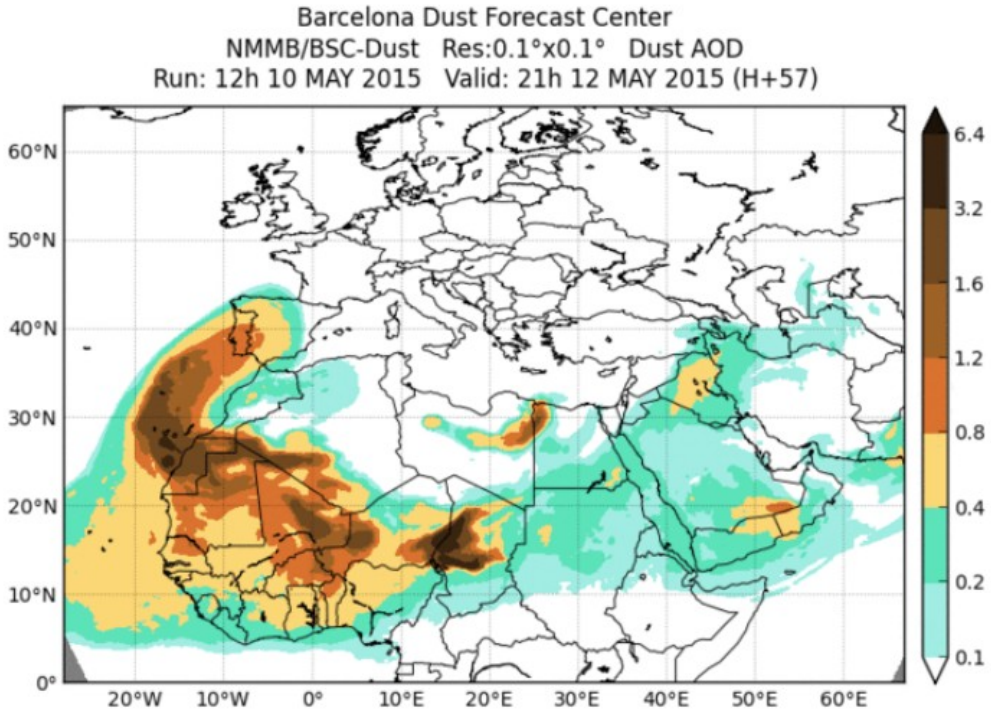
EL MUNDO

Edición España | Versión Clásica | SUSCRÍBETE | INICIAR SESIÓN

SECCIONES | Ciencia | Natura

METEOROLOGÍA Altas temperaturas desde comienzos de mayo

Una ola de calor y polvo sahariano adelanta el verano dos meses



Ahora en portada

- La Junta andaluza adjudicó burlando la ley
- Bruselas ofrece 20.000 plazas para refugiados a repartir entre los estados
- Un hombre mata a tiros a sus dos hermanos en Gran Canaria
- Cameron relanza su ofensiva contra 'el veneno del radicalismo'
- Susana Díaz paraliza la adjudicación de la mina tras estallar el caso Aznalcóllar

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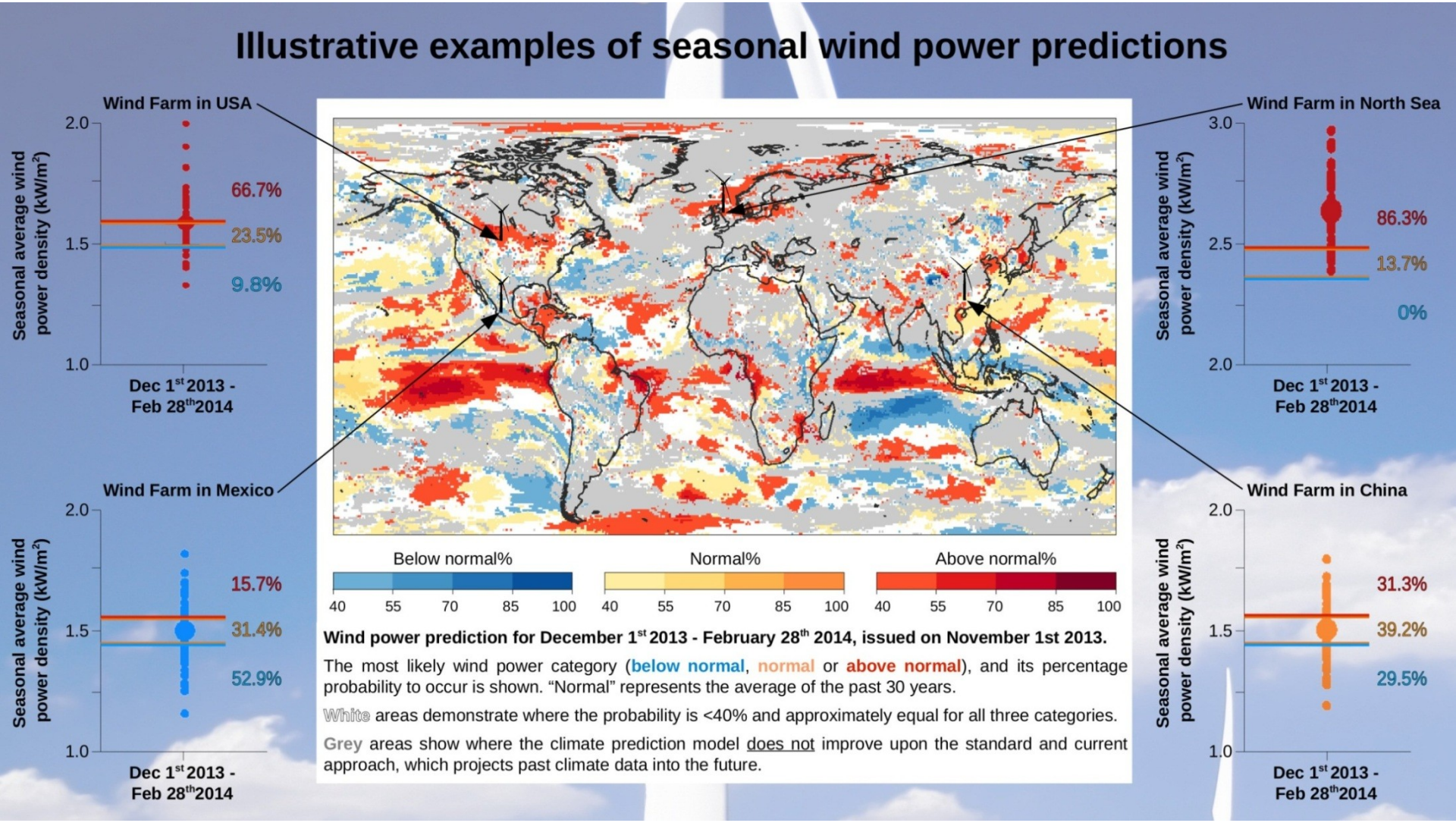
Noticias Relacionadas

GOBIERNO DE ESPAÑA | MINISTERIO DE MEDIO AMBIENTE Y MEDIO RURAL Y MARINO | AEMet Agencia Estatal de Meteorología

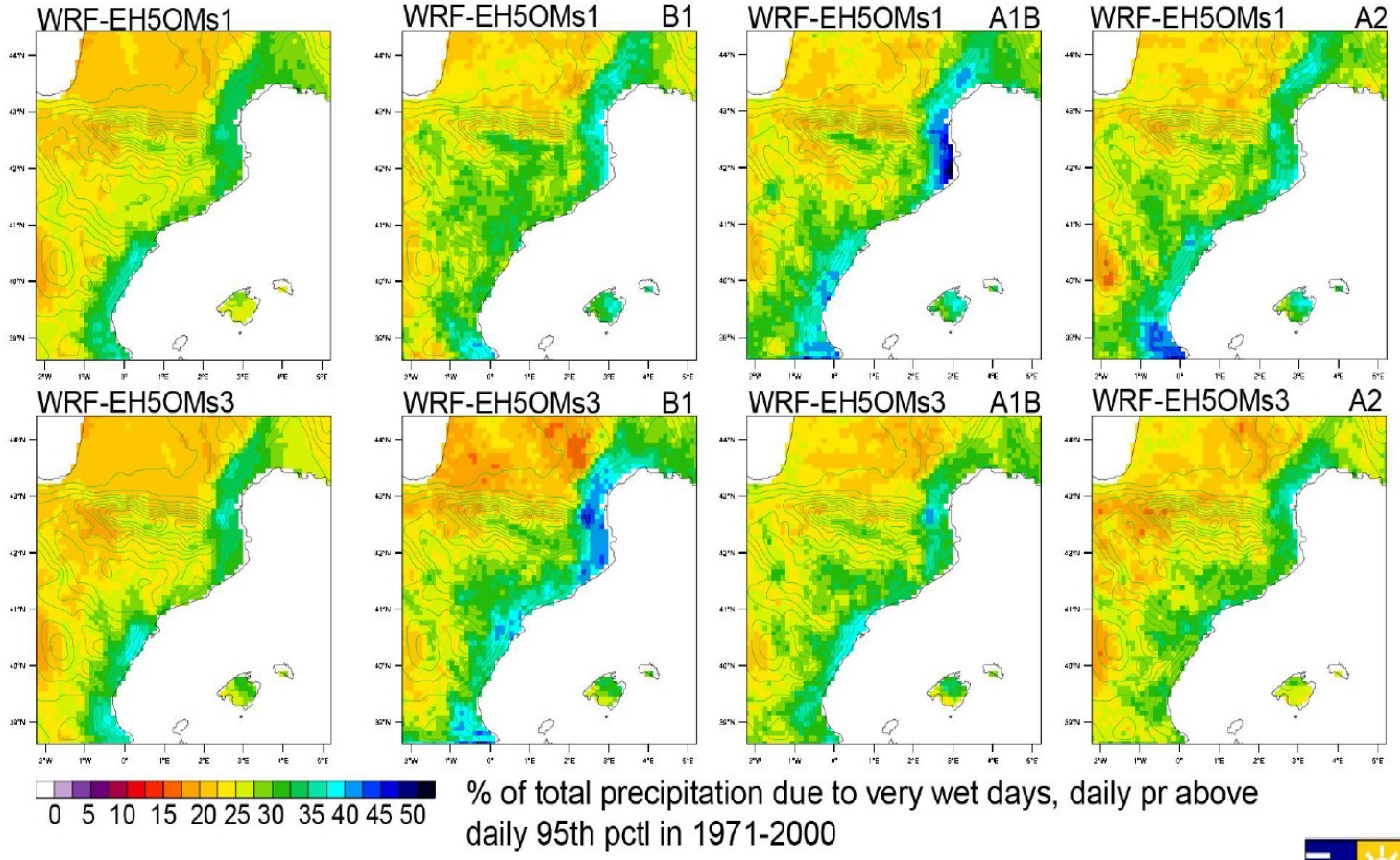
Seasonal wind power predictions



Regional climate modeling

Dynamical downscaling of climatic temperature and precipitation trends

This work aims to provide an assessment of temperature and precipitation projections for mid-21st century in the North Western Mediterranean Basin (NWMB) at high resolution.



This project has been conducted in collaboration with Servei Meteorològic de Catalunya:

meteo.cat

National and International collaborations

www.bsc.es

Thank you

For further information please contact
albert.soret@bsc.es